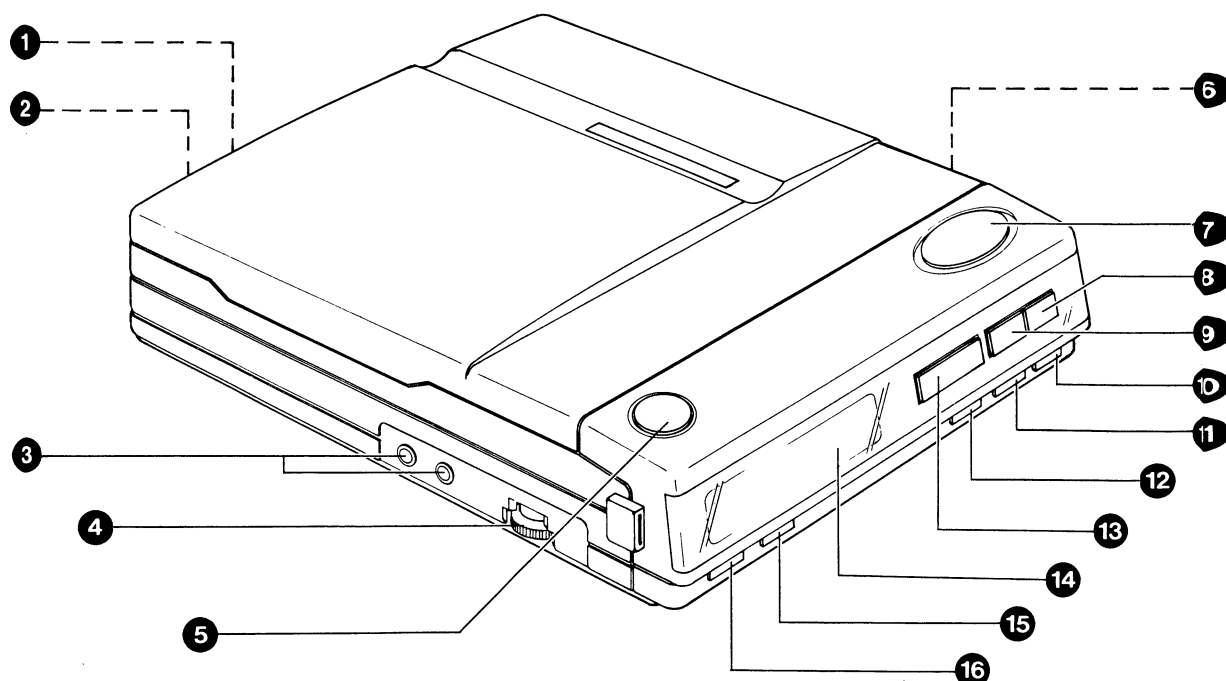


Service Service Service

For repair of the CD mechanism see Service Manual of
"Compact disc mechanism RCD-1G"

Service Manual

COMPACT
disc
DIGITAL AUDIO



Varo!

Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle
lasersäteilylle. Älä katso säteeseen.

Varning!

Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad.
Betrakta ej strålen.

CLASS 1
LASER PRODUCT

3122 110 1/82

Documentation Technique Service Dokumentation Documentazione di Servizio Huolto-Ohje Manual de Servicio Manual de Serviço



"Pour votre sécurité, ces documents
doivent être utilisés par des spécia-
listes agréés, seuls habilités à réparer
votre appareil en panne".











Subject to modification
4822 725 22665

Printed in The Netherlands
© Copyright reserved


PHILIPS

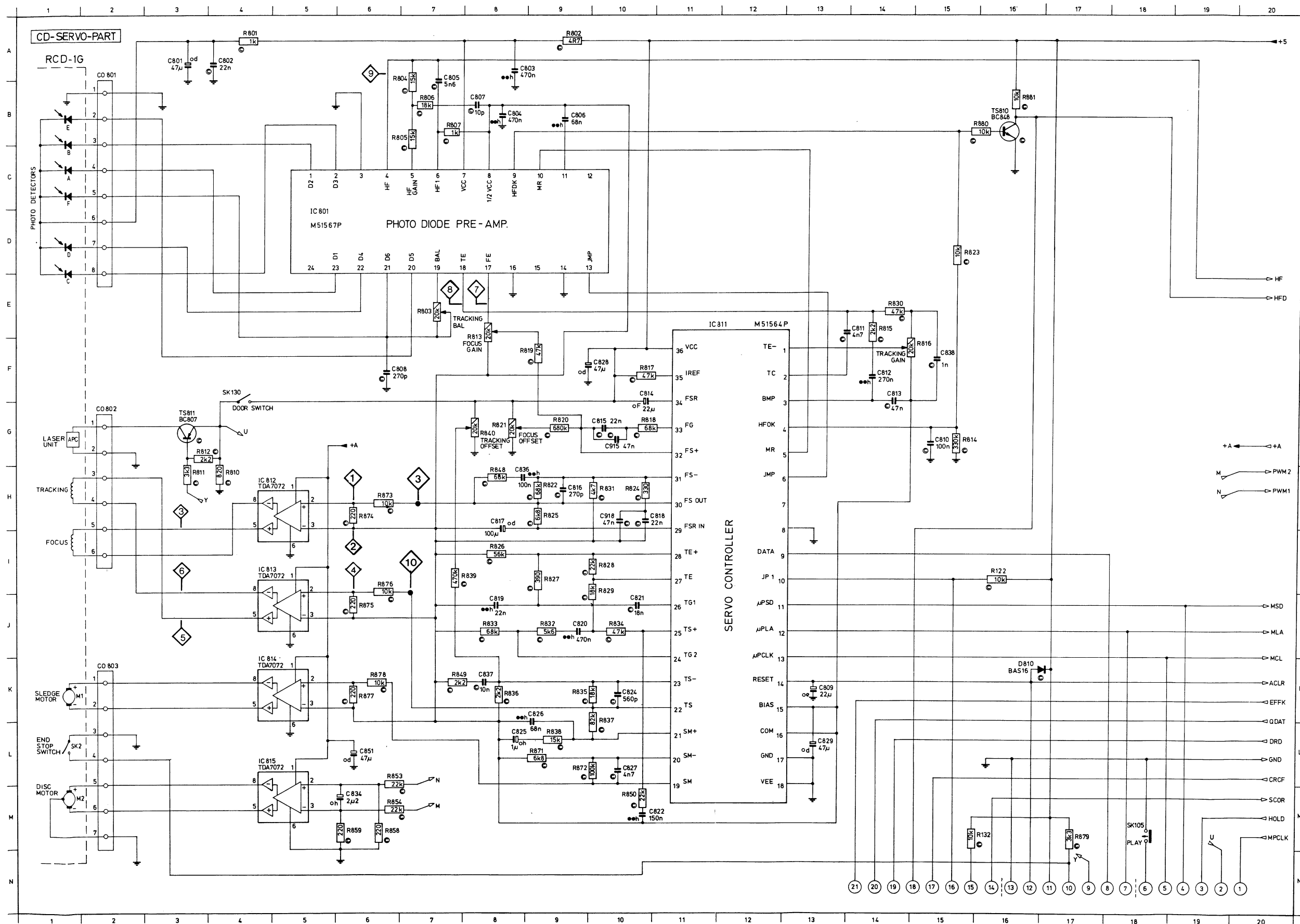
Published by
Consul Electronics

Connections and Controls

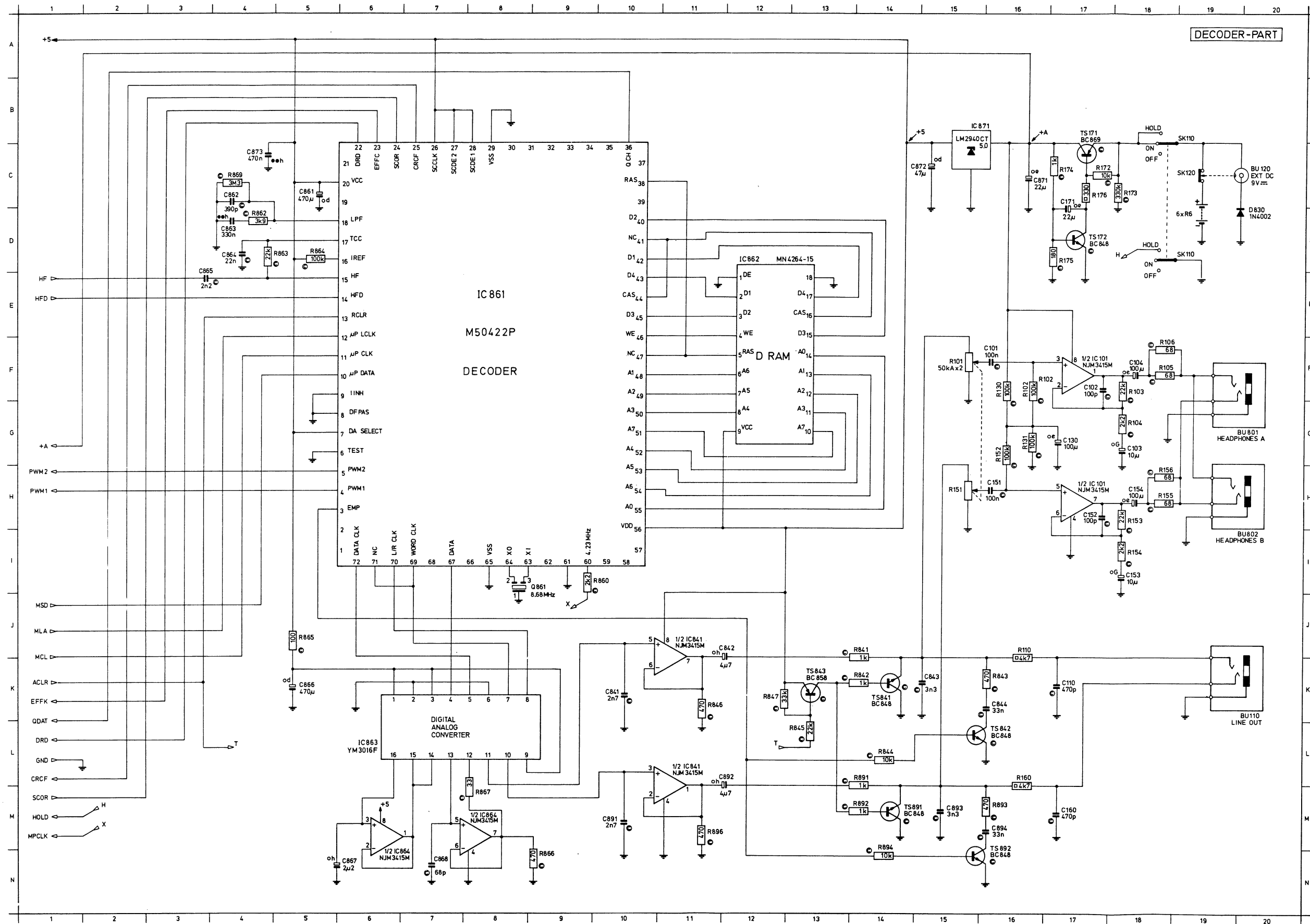
1		Line out	BU120
2		EXT. DC 9V	BU120
3		Headphone 1, 2	BU801/BU802
4		Volume Control	R101/R151
5		CD open	SK130
6	OFF/ON/HOLD	Mode Selector	SK110
7		Play/Pause	SK105
8		Next/Cue	SK102
9		Previous/Review	SK103
10		Store memory	SK101
11		Display memory	SK106
12		Clear memory	SK107
13		Stop	SK104
14		Display	DP100
15		Repeat	SK109
16		Introsan	SK108

Specification

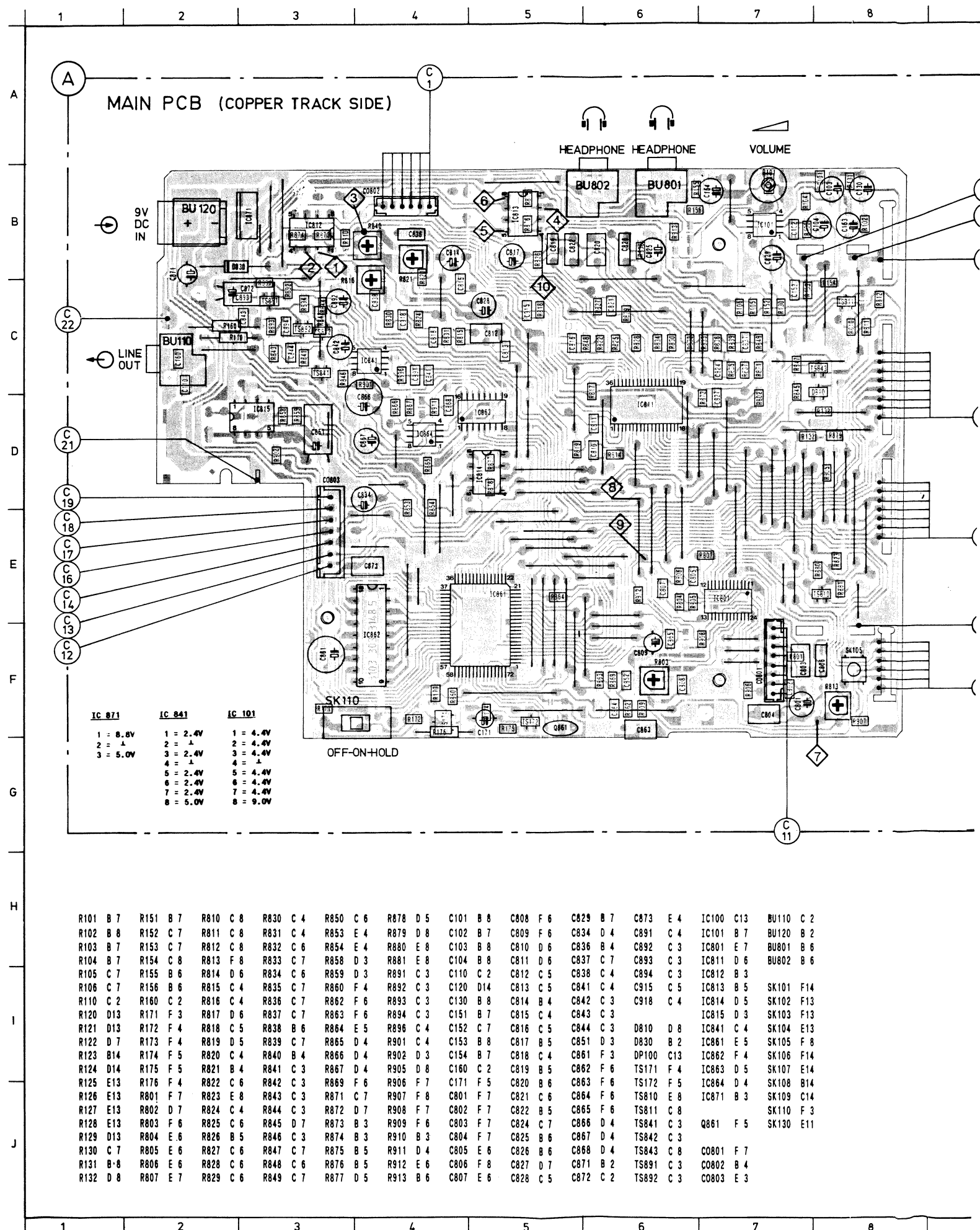
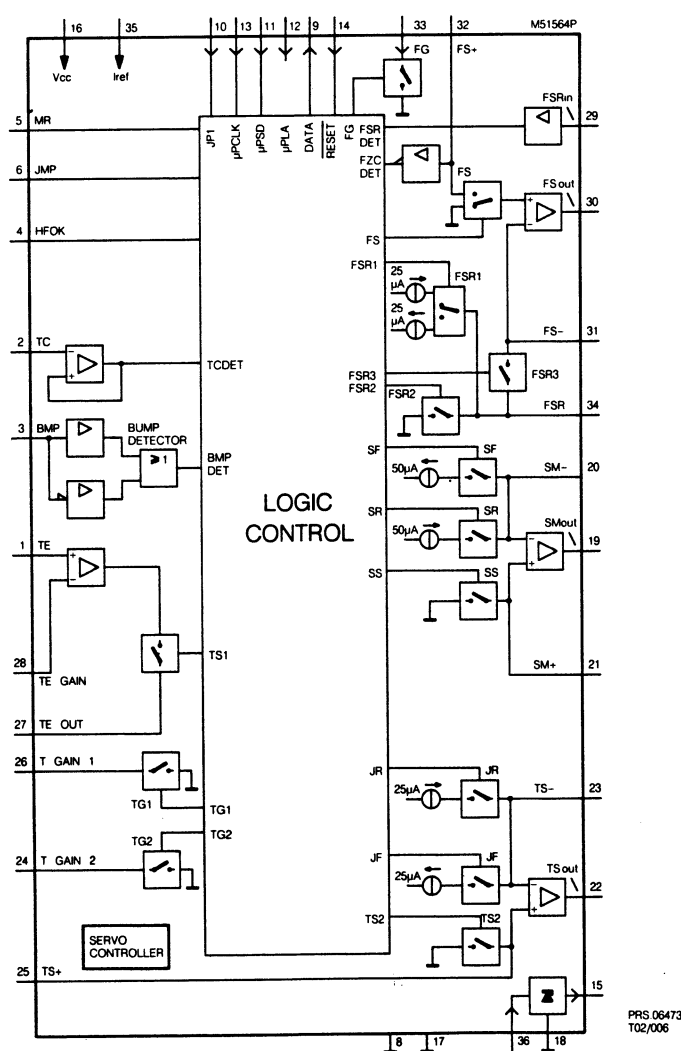
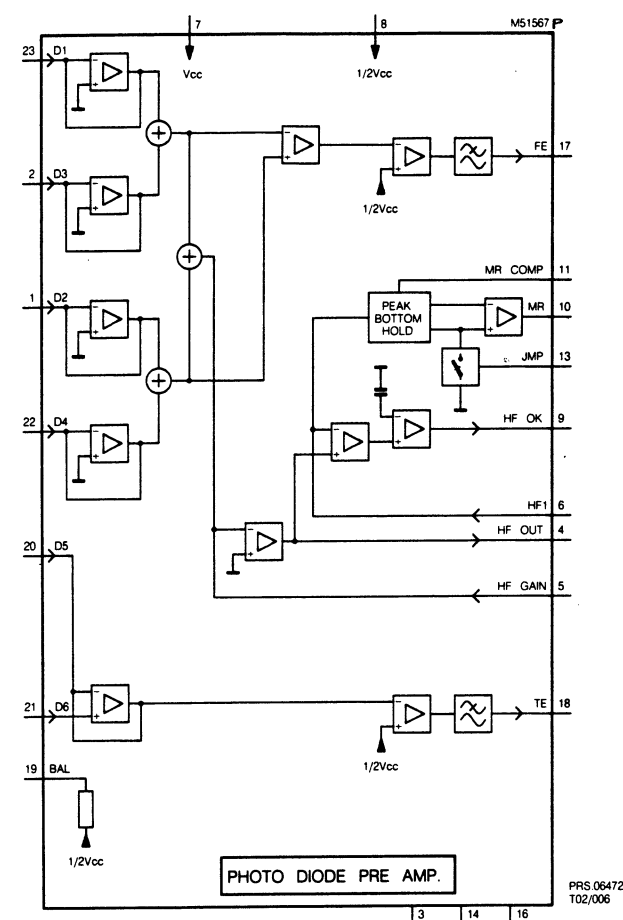
	:	9V (6xR6)
EXT. DC	:	9V 2.7W
Frequency response	:	20 - 20,000 Hz (+2/-4dB)
Line output level	:	0.8V +/- 2dB
Headphone socket 2x	:	32 Ω /20mW
Signal/noise ratio	:	\geq 80dB
Distortion	:	\leq 0.5% at 1KHz
Channel difference	:	\leq 2db at 1KHz
Channel crosstalk	:	\geq 50dB at 1KHz
De-emphasis	:	0 or 15/50 us switched automatically by subcode on the disc

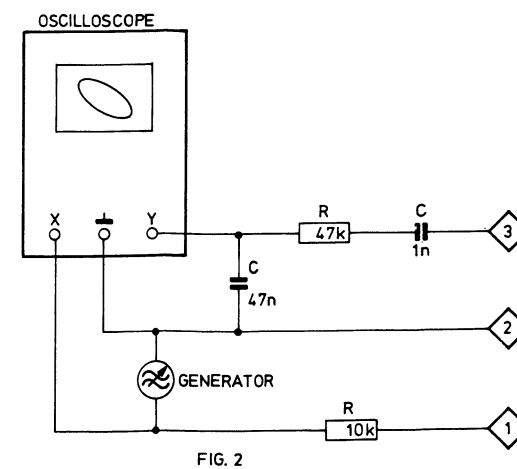
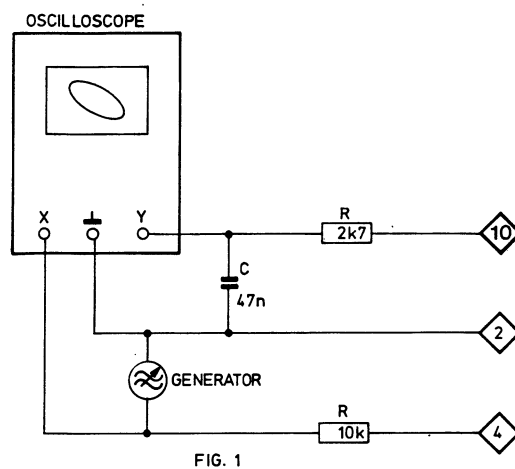
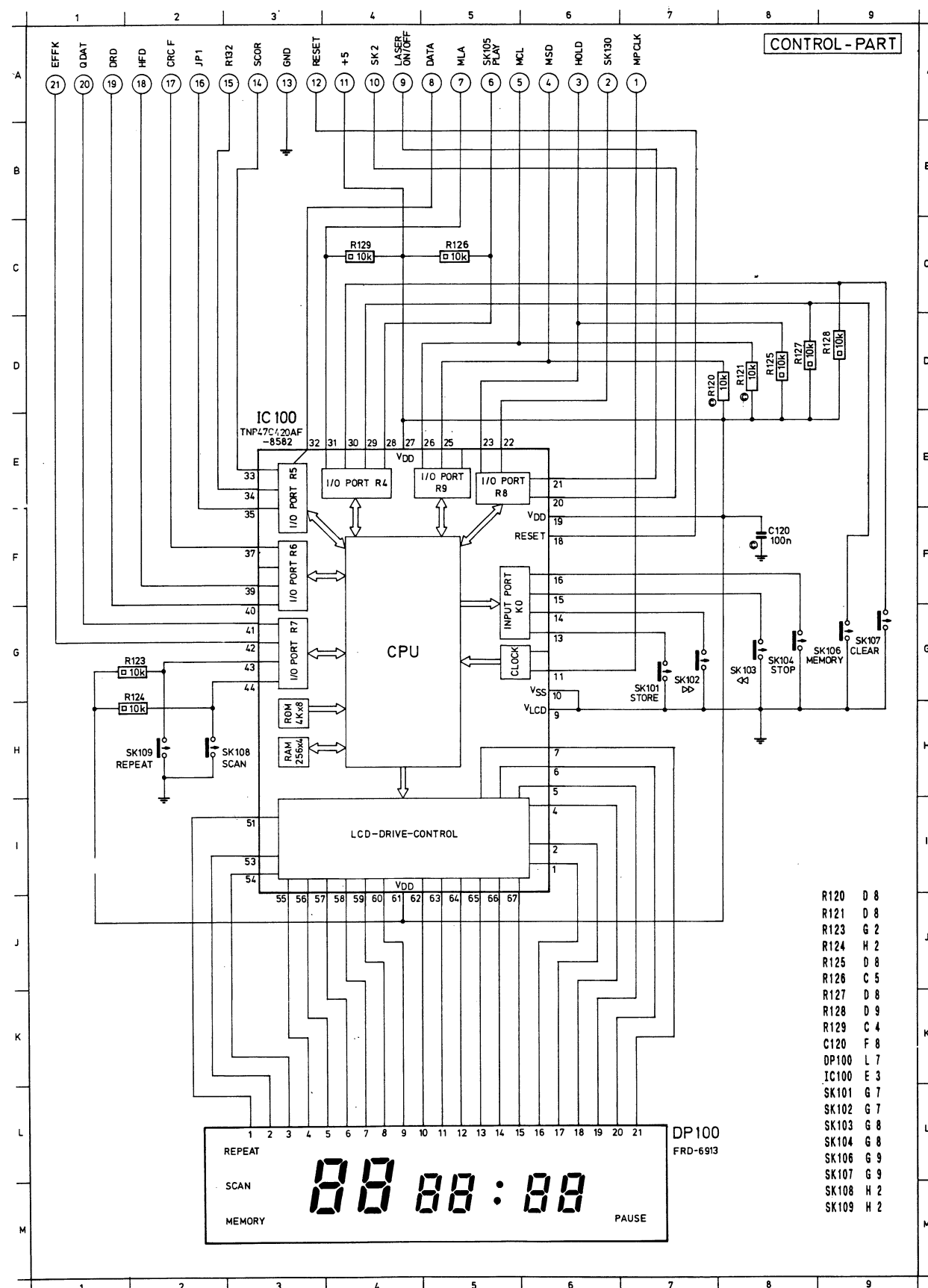


R122	I16	R879	M17
R132	M16	R880	B16
R801	A 4	R881	B16
R802	A 9	C801	A 3
R803	E 7	C802	A 4
R804	B 7	C803	A 8
R805	B 7	C804	B 8
R806	B 7	C805	B 7
R807	B 7	C806	B 9
R810	H 4	C807	B 8
R811	H 3	C808	F 6
R812	G 3	C809	K13
R813	E 8	C810	G15
R814	G15	C811	E14
R815	E14	C812	F14
R816	F15	C813	F14
R817	F10	C814	F10
R818	G10	C815	G10
R819	F 9	C816	H 9
R820	G 9	C817	H 8
R821	G 8	C818	H10
R822	H 9	C819	J 8
R823	D15	C820	J 9
R824	H10	C821	J10
R825	H 9	C822	M10
R826	I 8	C824	K10
R827	I 9	C825	L 8
R828	I10	C826	K 9
R829	I10	C827	L10
R830	E14	C828	F 9
R831	H10	C829	L13
R832	J 9	C834	M 6
R833	J 8	C836	H 8
R834	J10	C837	K 8
R835	K10	C838	F15
R836	K 8	C851	L 6
R837	K10	C915	G10
R838	L 9	C918	H10
R839	I 7	D819	K16
R840	G 8	IC801	D 5
R848	H 8	IC811	E11
R849	K 7	IC812	H 4
R850	M10	IC813	I 4
R853	L 6	IC814	K 4
R854	M 6	IC815	L 4
R858	M 6	TS810	B16
R859	M 6	TS811	G 3
R871	L 9	C801	B 2
R872	L10	C802	G 2
R873	H 6	C803	K 2
R874	H 6	SK105	M18
R875	J 6	SK130	F 4
R876	I 6		
R877	K 6		
R878	K 6		



R101	F15	C844	K16
R102	F16	C851	C 5
R103	F18	C862	C 4
R104	G18	C863	D 4
R105	F18	C864	D 4
R106	F18	C865	E 3
R110	J16	C866	K 5
R130	F16	C867	N 6
R131	G16	C868	N 7
R152	G16	C871	C16
R153	H18	C872	C15
R154	I18	C873	C 4
R155	H18	C891	M10
R156	H18	C892	L12
R160	L16	C893	M15
R172	C17	C894	M16
R173	C18	D830	D20
R174	C17	IC101	F17
R175	D17	IC841	L11
R176	C13	IC861	E 8
R841	J14	IC862	E12
R842	K14	IC863	L 6
R843	K16	IC864	M 6
R844	L14	IC871	B15
R845	L13	TS171	C17
R846	K11	TS172	D17
R847	K12	TS841	K14
R860	I 9	TS842	L16
R862	D 4	TS843	K13
R863	D 4	TS891	M14
R864	D 5	TS892	N16
R865	J 5	BU110	K20
R866	N 9	BU120	C20
R867	M 8	BU801	G20
R869	C 4	BU802	H20
R891	L14	Q851	I 8
R892	M14	SH110	B18
R893	M16		
R894	N14		
R896	M11		
C101	F16		
C102	F17		
C103	G18		
C104	F18		
C110	K17		
C130	G17		
C151	H16		
C152	H17		
C153	I18		
C154	H18		
C160	M17		
C171	C17		
C841	K10		
C842	J12		
C843	K15		





CD part					
TRACKING OFFSET					
Stop			R840		6 6 0 V ± 10 mV
TRACKING BALANCE					
Service* pos. 1 display "_"			R803	8 2 Adjust to 0 V DC offset	
TRACKING GAIN					
Play with disc 5	1200 Hz 200 mV	see Fig. 1	R816		See Fig. 1 CHX = 0.2 V/DIV CHY = 50 mV/DIV Adjust to circle
FOCUS GAIN					
Play with disc 5	1100 Hz 700 mV	See Fig. 2	R813		See Fig. 2 CHX = 0.5 V/DIV CHY = 5 mV/DIV Adjust to circle
FOCUS OFFSET					
Play with disc 5			R821		9 Max HF
			Check only	7 2 U DC measured = Ux	
			R821	7 2 Adjust to $\frac{U_x}{2}$	

* Service pos. "0" =
store + memory + power on
Display "—"

Service pos. "1" =
Service pos. "0", press play;
Display "—"

Service pos. "2" =
Service pos. "1", press
introscan;
Display "—"

Display test A =
Service pos. "2", press play.
(see Fig. 3)

Display test B =
Display test A, press play.
(see Fig. 3)

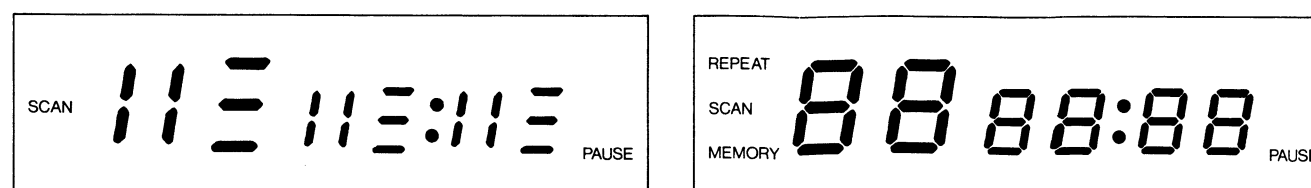
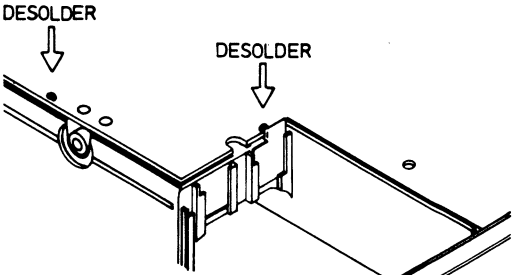


Fig. 3

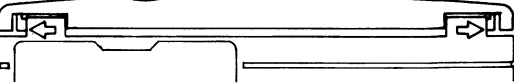
MECHANICAL PARTSLIST

51	4822 444 60686
51 -/17	4822 444 60687
52	4822 410 60631
53	4822 492 42271
54	4822 404 10756
56	4822 444 30428
57	4822 444 40366
58	4822 381 11113
59	4822 410 60629
61	4822 492 63985
62	4822 492 42272
63	4822 532 61103
64	4822 532 61104
66	4822 413 31598
67	4822 410 60632
68	4822 444 40365
69	4822 462 10313
71	4822 526 20168
72	4822 532 52217
73	4822 381 11114
74	4822 404 10755
76	4822 444 60685
77	4822 411 61683
78	4822 492 63982
79	4822 492 63984
81	4822 492 63963
82	4822 444 60571
83	4822 290 80806
84	4822 492 51724
86	4822 325 20138
87	4822 290 80807
88	4822 404 60471
89	4822 466 70679
M1,4x4	4822 502 13083
Case	4822 600 70592
Strap	4822 498 20116

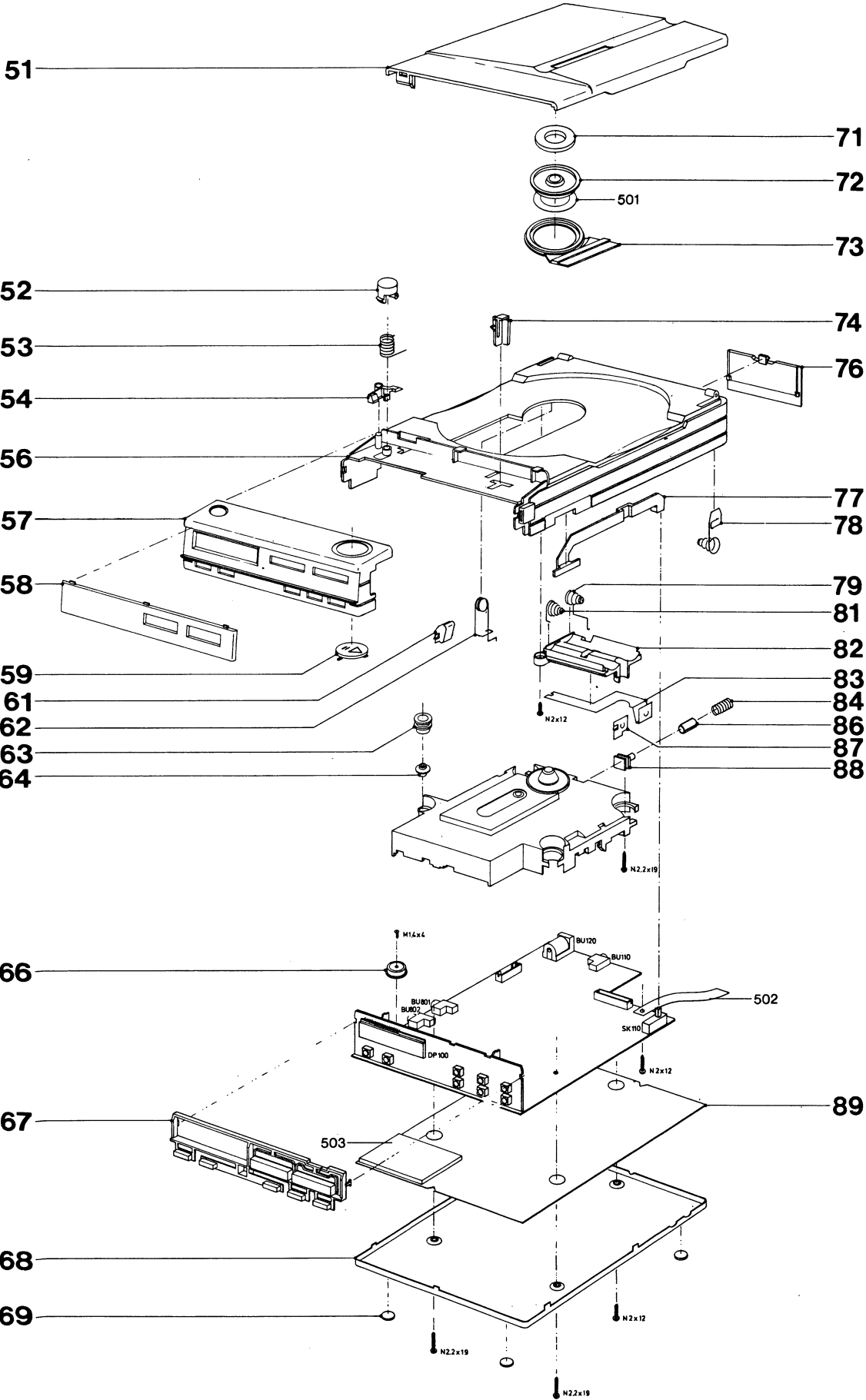
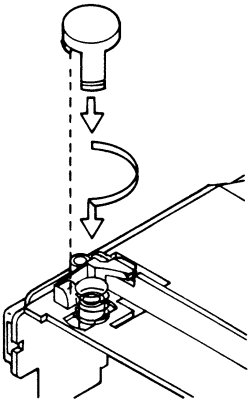
REMOVING PCB



REMOVING LID



MOUNTING BUTTON







Chips

R 102	4822	111	91518	100k	5%	0.1W
R 103	4822	111	91523	22k	5%	0.1W
R 104	4822	111	91522	2k2	5%	0.1W
R 105	4822	116	80887	68R	5%	0.1W
R 106	4822	116	80887	68R	5%	0.1W
R 120	4822	111	91517	10k	5%	0.1W
R 121	4822	111	91517	10k	5%	0.1W
R 122	4822	111	91517	10k	5%	0.1W
R 125	4822	111	91517	10k	5%	0.1W
R 130	4822	111	91518	100k	5%	0.1W
R 131	4822	111	91518	100k	5%	0.1W
R 132	4822	111	91517	10k	5%	0.1W
R 152	4822	111	91518	100k	5%	0.1W
R 153	4822	111	91523	22k	5%	0.1W
R 154	4822	111	91522	2k2	5%	0.1W
R 155	4822	116	80887	68R	5%	0.1W
R 156	4822	116	80887	68R	5%	0.1W
R 172	4822	111	91517	10k	5%	0.1W
R 173	4822	116	90345	330k	5%	0.1W
R 174	4822	111	91516	1k	5%	0.1W
R 175	4822	111	90242	180R	5%	0.1W
R 801	4822	111	91516	1k	5%	0.1W
R 802	4822	111	90376	4R7	5%	0.1W
R 804	4822	111	91498	15k	5%	0.1W
R 805	4822	111	91498	15k	5%	0.1W
R 806	4822	111	91521	18k	5%	0.1W
R 807	4822	111	91516	1k	5%	0.1W
R 810	4822	116	90382	820R	5%	0.1W
R 811	4822	111	91526	3k3	5%	0.1W
R 812	4822	111	91522	2k2	5%	0.1W
R 814	4822	116	90345	330k	5%	0.1W
R 815	4822	111	91522	2k2	5%	0.1W
R 817	4822	116	90216	47k	5%	0.1W
R 818	4822	116	90347	68k	5%	0.1W
R 819	4822	116	90216	47k	5%	0.1W
R 820	4822	116	90381	680k	5%	0.1W
R 822	4822	116	90347	68k	5%	0.1W
R 823	4822	111	91517	10k	5%	0.1W
R 824	4822	111	91501	330R	5%	0.1W
R 825	4822	111	90464	6k8	5%	0.1W
R 826	4822	111	91535	56k	5%	0.1W
R 827	4822	116	90214	390R	5%	0.1W
R 828	4822	111	91523	22k	5%	0.1W
R 829	4822	111	91521	18k	5%	0.1W
R 830	4822	116	90216	47k	5%	0.1W
R 831	4822	111	91532	4k7	5%	0.1W
R 832	4822	111	91534	5k6	5%	0.1W
R 833	4822	116	90347	68k	5%	0.1W
R 834	4822	116	90216	47k	5%	0.1W
R 835	4822	111	91521	18k	5%	0.1W
R 836	4822	111	91522	2k2	5%	0.1W
R 837	4822	111	90575	82k	5%	0.1W
R 839	4822	111	90161	470k	5%	0.1W
R 841	4822	111	91516	1k	5%	0.1W
R 843	4822	111	91531	470R	5%	0.1W
R 844	4822	111	91517	10k	5%	0.1W
R 845	4822	111	91523	22k	5%	0.1W
R 846	4822	111	91531	470R	5%	0.1W
R 847	4822	116	90378	33k	5%	0.1W
R 848	4822	116	90347	68k	5%	0.1W
R 849	4822	111	91522	2k2	5%	0.1W
R 850	4822	111	91523	22k	5%	0.1W
R 853	4822	111	91523	22k	5%	0.1W
R 854	4822	111	91523	22k	5%	0.1W
R 858	4822	111	90339	220R	5%	0.1W

Chips

R 859	4822	111	90339	220R	5%	0.1W
R 860	4822	111	91522	2k2	5%	0.1W
R 862	4822	111	91527	3k9	5%	0.1W
R 863	4822	111	91523	22k	5%	0.1W
R 864	4822	111	91518	100k	5%	0.1W
R 865	4822	111	90091	100R	5%	0.1W
R 866	4822	111	91531	470R	5%	0.1W
R 867	4822	111	90379	33R	5%	0.1W
R 869	4822	111	90191	3M3	5%	0.1W
R 871	4822	111	90464	6k8	5%	0.1W
R 872	4822	111	91518	100k	5%	0.1W
R 873	4822	111	91517	10k	5%	0.1W
R 874	4822	111	90339	220R	5%	0.1W
R 875	4822	111	90339	220R	5%	0.1W
R 876	4822	111	91517	10k	5%	0.1W
R 877	4822	111	90339	220R	5%	0.1W
R 878	4822	111	91517	10k	5%	0.1W
R 879	4822	111	91526	3k3	5%	0.1W
R 880	4822	111	91517	10k	5%	0.1W
R 881	4822	111	91517	10k	5%	0.1W
R 891	4822	111	91516	1k	5%	0.1W
R 892	4822	111	91516	1k	5%	0.1W
R 893	4822	111	91531	470R	5%	0.1W
R 894	4822	111	91517	10k	5%	0.1W
R 896	4822	111	91531	470R	5%	0.1W
R 9	4822	116	90384	0E	5%	0.1W

-R- 			-TS- 		
R101	4822 100 11359	50k Potmeter	171	4822 130 60142	BC869
R151	4822 100 11359	50k Potmeter		4822 130 61207	BC848
R803	4822 100 11596	20k Trim Potm.	811	4822 130 42132	BC807
R813	4822 100 11596	20k Trim Potm.	843	5322 130 42012	BC858
R816	4822 100 11596	20k Trim Potm.			
R821	4822 100 11596	20k Trim Potm.			
R840	4822 100 11596	20k Trim Potm.			
-D- 			-MISCELLANEOUS-		
830	4822 130 31438	1N4002	BU110	4822 267 40788	socket, line out
810	5322 130 31928	BAS16	BU120	4822 267 31179	socket, ext. DC
			BU801	4822 267 40799	socket, headphone
			BU802	4822 267 40788	socket, headphone
			DP100	4822 130 90545	FRD-6913 display
			Q861	4822 242 72565	crystal 8.46 MHz
			SK101	4822 276 12465	switch
			SK102	4822 276 12465	switch
			SK103	4822 276 12465	switch
			SK104	4822 276 12465	switch
			SK105	4822 276 12465	switch
			SK106	4822 276 12465	switch
			SK107	4822 276 12465	switch
			SK108	4822 276 12465	switch
			SK109	4822 276 12465	switch
			SK110	4822 276 12465	switch
			SK130	4822 276 12465	switch
			AC001	4822 218 10259	AC/DC adaptor
			AC001	4822 218 10319	AC/DC adaptor -/17
-IC- 					
100	4822 209 73667	TMP47C420AF-8582			
101,841,864	4822 209 73157	NJM3415M			
801	4822 209 72814	M51567P			
811	4822 209 72815	M51564P			
812-815	4822 209 62188	TDA7072/N2			
861	4822 209 72813	M50422P			
862	4822 209 70422	NM4364-15			
863	4822 209 73864	YM3016F			
871	5322 209 72487	LM2940CT-5.0			

GB WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unsorgfältige Behandlung im Reparaturfall kan die Lebensdauer drastisch reduzieren. Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes. Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

NL WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD). Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat. Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

I AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD). La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.



GB

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

NL

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

F

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

D

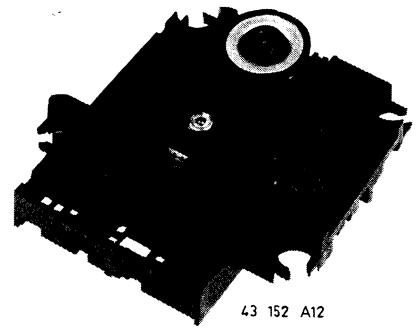
Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

I

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.



Service
Service
Service



43 152 A12

Service Manual

COMPACT
disc
DIGITAL AUDIO

(GB)

A service disc-holddown

The disc should always be down well on the turntable. If the mechanism has to be dismantled for repair, a service disc-holddown should be used. The CD mechanism then can function normally as in the set.

(F)

Le presse-disque

Le disque doit toujours être bien placé sur le plateau tournant. Si, pour des besoins de réparation, il faut démonter le mécanisme utiliser par la suite un presse-disque. Le mécanisme du CD fonctionnera alors normalement, en dehors de l'appareil.

(I)

Il premidisco

Il disco deve essere posizionato sul piatto sempre nel modo corretto. Se il meccanismo deve essere smontato per la riparazione, si deve utilizzare un premidisco separato. Quindi, il meccanismo CD può funzionare normalmente al di fuori nell'apparecchio.

(NL)

De aandrukker

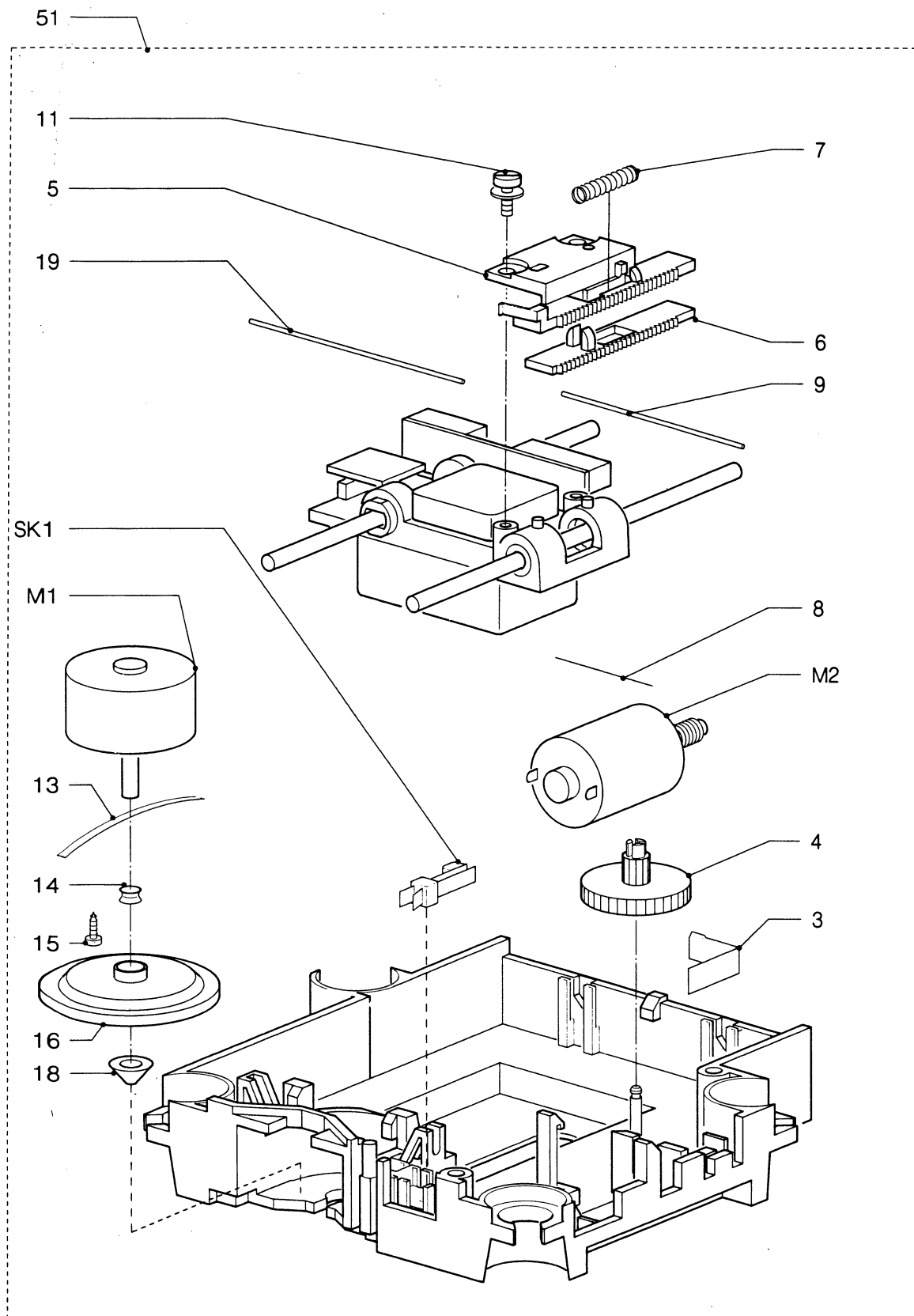
De plaat moet altijd goed aanliggen op de draaitafel. Wanneer voor reparatie het mechanisme moet worden uitgebouwd, gebruik dan een losse aandrukker. Het CD mechanisme kan dan normaal buiten het apparaat functioneren.

(D)

Der Nieherhalter

Die Platte muss am Plattenteller immer richtig anliegen. Wenn in Reparaturfällen der Mechanismus ausgebaut werden soll ist ein separate Nieherhalter zu benutzen. Der CD-Mechanismus kann dann in gewohnter Weise wie in dem Gerät arbeiten.

CLASS 1
LASER PRODUCT



Only those parts of which the service code numbers are stated are normal service parts.

EVA.00503
824/T19

3	4822 492 63943	9	4822 492 63942
4	4822 522 32451	11	4822 502 13065
5	4822 522 32452	18	4822 462 41394
6	4822 522 32453	19	4822 492 70047
7	4822 492 51979	51	4822 691 10271
8	4822 492 63941	M2	4822 361 21113
		SK1	4822 276 12163

(GB)

WARNING

ESD



THE PHOTODIODES AND THE LASER ARE MORE SENSITIVE TO ELECTROSTATIC DISCHARGES THAN MOS ICs. CARELESS HANDLING DURING SERVICING MAY REDUCE LIFE EXPECTANCY DRASTICALLY. FOR THIS REASON CARE SHOULD BE TAKEN THAT DURING SERVICING THE POTENTIALS OF THE AIDS AND YOURSELF ARE EQUAL TO THAT OF THE SCREENING OF THE SET.

(NL)

WAARSCHUWING

ESD



DE FOTODIODES EN DE LASER ZIJN VOOR ELEKTROSTATISCHE ONTLADINGEN GEVOELIGER DAN EEN MOS IC. ONZORGVULDIG BEHANDELEN TIJDENS HET SERVICEN KAN DE LEVENSDUUR DRASTISCH VERMINDEREN. ZORG ER DAAROM VOOR DAT TIJDENS HET SERVICEN DE HULPMIDDELEN EN UZELF HETZELFDE POTENTIAAL HEBBEN ALS DE AFSCHERMING VAN HET APPARAAT.

(F)

ATTENTION

ESD



LES PHOTO-DIODES ET LE LASER SONT PLUS SENSIBLES AUX DÉCHARGES STATIQUES QU'UN IC MOS. LEUR LONGÉEVITÉ DÉPEND EN GRANDE PARTIE DE LA MANIÈRE DONT ON LES TRAITE PENDANT LA MAINTENANCE. SOYEZ DONC SÛR QUE EN COURS DE MANIPULATION LES ACCESSOIRES ET VOUS-MÊME SOYEZ AU MÊME POTENTIEL QUE LE BLINDAGE DE L'APPAREIL.

(D)

WARNUNG

ESD



DIE LICHTDIODEN UND DER LASER SIND GEGENÜBER ELEKTROSTATISCHEN ENTLADUNGEN EMPFINLICHER ALS EIN MOS-IC. UNSORGFÄLTIGES HANTIEREN WÄHREND DER SERVICEARBEITEN KANN DIE LEBENSDAUER DRASTISCH REDUZIEREN. DAHER IST DAFÜR ZU SORGEN, DASS WÄHREND DER SERVICEARBEITEN DIE HILFSMITTEL UND SIE SELBER DAS GLEICHE POTENTIAL AUFWEISEN WIE DIE ABSCHIRMUNG DES GERÄTES.

(I)

AVVERTIMENTO

ESD



I FOTODIODI ED IL LASER SONO MOLTO PIÙ SENSIBILI ALLE SCARICHE ELETTROSTATICHE DI QUANTO LO SIANO GLI IC MOS. UN TRATTAMENTO NON ACCURATO DURANTE LA RIPARAZIONE POTREBBE RIDURRE DRASTICAMENTE LA LORO ESISTENZA. PER QUESTA RAGIONE SI DEVE FARE ATTENZIONE CHE DURANTE LA RIPARAZIONE IL POTENZIALE DEGLI STRUMENTI E DI VOI STESSI SIA UGUALE A QUELLO DELLA SCHERMATURA DELL'APPARECCHIO.